## **ABSTRACT**

A method and system that detect image pixels of noisy and sharp image edges, and enhance such pixels differently than other pixels, so that noise around the detected pixels is essentially not boosted. A detection process is conducted on a pixel basis, wherein each pixel is checked together with its neighboring pixels inside a rectangular window centered around a selected/current pixel to determine whether the current pixel belongs to a noisy and sharp vertical image edge or a noisy and sharp horizontal image edge. If the current pixel is classified as a regular pixel, image detail enhancement is performed normally at the current pixel location. Otherwise, mean values of pixels in a rectangular window centered with the current pixel are used to calculate the unsharp signal. The unsharp signal is then processed as in the case of the regular pixels to obtain a detail enhanced image.